

**Amendments to the Claims:**

1. (Currently amended) A chemical change agent for use as an additive to combustible materials to facilitate complete combustion of a solid fuel, said agent consisting essentially of the following by weight:

A Slack Wax	<u>0-60% 0.5%-70%</u> .
A Fatty Acid	.5%-10%
Ammonia	.2%-2%
Ammonia like compounds selected from the group consisting of an Amide, Amines, an Amino Acid and other chemical compounds containing at least one NH <sub>2</sub> function group	0 – 60%
Water	42%-90%.

2. (Previously presented) A synfuel composition for use as a combustible fuel additive to enhance complete combustion and to reduce NOx in combustion gases, said composition consisting essentially of the following by weight:

A Slack Wax	11%
Stearic Acid	3.5%
An Amide	20%
Ammonia	.5%.
Water	65%.

3. (Currently amended) A chemical composition for use on coal, wood, waste tires and other solid fuels where solid fuels are treated with chemical composition so as to reduce formation of NOx in combustion gases, said composition consisting essentially of the following by weight:

A Slack Wax	<u>0-60% 0.5%-70%</u>
A Fatty Acid	.5%-10%

Ammonia .	.2%-2%
Ammonia like compounds selected from the group consisting of an Amide, Amines, an Amino Acid and other chemical compounds containing at least one NH <sub>2</sub> , functional group	0-60%
Water	42%-90%.

4. (Previously presented) A chemical composition for use as a combustible fuel additive, said composition consisting essentially of the following by weight:

A Slack Wax	11%
A Fatty Acid	3.5%
An Amide	20%
Ammonia	.5%
Water	65%.

5. (Previously presented) A chemical composition as in claim 4 wherein said fatty acid is stearic acid.

6. (Original) A chemical composition as in claim 4 wherein said amide is urea.

7. (Currently amended) A chemical change reagent composition for use as a coal treatment to enhance complete combustion and to reduce NOx in combustion gases, said composition consisting essentially of the following by weight:

a Hydrocarbon wax	0-60% <u>0.5%-70%</u>
a Fatty acid	0.5%-10%
Ammonia	0.2%-2%
Urea	0-60%
Water	30-90%

8. (Previously presented) A chemical change reagent for use as a coal treatment, said reagent consisting essentially of the following by weight:

a Hydrocarbon wax	11%
a Fatty Acid	3.5%
Ammonia	.5%
An Amide	20%
Water	65%

9. (Original) A chemical change reagent as in claim 8 wherein said amide is urea.

10. (Currently amended) A chemical change reagent for use on coal, wood, and waste tires to treat said substances so as to reduce NOx in combustion gases, said reagent consisting essentially of the following by weight:

a Hydrocarbon wax	<u>0-60%0.5%-70%</u>
a Fatty acid	0-10%
Ammonia	0-2%
Urea	10%-60%
Water	30-90%

11. (Previously presented) A chemical change agent for use on wood, coal and waste tires to treat said substances so as to reduce NOx in combustion gases, said agent consisting essentially of the following by weight:

a Hydrocarbon wax	11%
a Fatty acid	3.5%
Ammonia	.5%
an Amide	20%
Water	65%

12. (Original) A chemical change agent as in claim 11 wherein said amide is urea.
13. (Original) A reagent as in claim 7 and including a percentage of a wetting agent.
14. (Original) A reagent as in claim 13 wherein said wetting agent is used in 0.5% concentrations.
15. (Previously presented) A reagent as in claim 7 further comprising 0-10% of Titanium Dioxide.
16. (Previously presented) A reagent as in claim 8 further comprising 0-10% Titanium Dioxide.
17. (Previously presented) A reagent as in claim 10 further comprising 0-10% Titanium Dioxide.
18. (Previously presented) A reagent as in claim 11 further comprising 0-10% Titanium Dioxide.
19. (Currently amended) A chemical composition to be added to another chemical change agent that is compatible with coal and other fuels to promote reduction of NOx

in the resultant combustion gases, said composition consisting essentially of the following by weight:

Ammonia	0-2%
Water	30-95%
Ammonia like compounds selected from the group consisting of Amides, Amines, Amino acid and other chemical compounds which contain at least one NH, NH <sub>2</sub> or NH <sub>3</sub> functional group	0-60%
Titanium Dioxide	0-10%
<u>and further comprising Titanium Dioxide.</u>	

20. (Currently amended) A composition for adding to coal prior to combustion for lowering the NOx emissions, said composition consisting essentially of the following by weight:

Ammonia	0-2%
Wetting Agent	0-5%
Water	30-95%
Ammonia like compounds selected from the group consisting of Amides, Amines, Amino acid And other chemical compounds Which contain at least one NH, NH <sub>2</sub> or NH <sub>3</sub> functional group	0-60%
Titanium Dioxide	0-10%
<u>and further comprising Titanium Dioxide.</u>	

21. (Previously presented) A chemical composition as in claim 20 having the ingredients in claim 20 comprising 1 to 20 parts and 1-6 parts of the following by weight:

a Hydrocarbon wax	0-60%
a Fatty acid	0-10%
Ammonia	0-2%
Water	30-90%

22. (Currently amended) A method of reducing NOx emissions in the burning of coal, said method comprising

providing an NOx reducing chemical change agent;

adding a catalytic compounds to said NOx reducing chemical change agent or to the coal directly before or during combustion, said catalysts being of small particle size;

and

adding said NOx reducing chemical change agent to said coal prior to or during burning,

wherein said catalytic compound is added so that it is placed on the surface of the coal and wherein the catalytic compound works in the flue gases.

23. (Original) A method as in claim 22 which includes adding a wetting agent to said coal and agent mixture.

24. (Previously presented) A method as in claim 22 wherein said NOx reducing chemical change agent includes an agent selected from the group consisting of Aluminum Silicate, Vanadium Oxide, Tungsten Oxide, Titanium Dioxide, Iron Oxide, other Iron Compounds and a combination of the foregoing.

25. (Original) A method as in claim 22 wherein said coal/agent mixture is ground finely into a dust to promote even distribution.

26. (Previously presented) A method as in claim 22 wherein said NOx reducing chemical change agent is a composition consisting essentially of the following by weight:

a Hydrocarbon wax	0-60%
a Fatty acid	0-10%
Ammonia	0-2%
Ammonia like compounds selected from the group consisting of Amides, Amines, Ammo acid and other chemical compounds which contain at least one NH, NH <sub>2</sub> or NH <sub>3</sub> functional group	0-60%
Water	30-90%

27. (Previously presented) A method as in claim 22 wherein said NOx reducing chemical change agent includes an agent selected from the group consisting of:

Aluminum Silicate  
Vanadium Oxide  
Tungsten Oxide  
Titanium Dioxide  
Iron Oxide as well as other iron containing compounds, and combinations of the foregoing.

28. (Currently amended) A method of reducing NOx in combustible emissions, said method comprising:

providing a source of combustible material,  
adding a NOx reduction agent or reagent to said material prior to burning,  
said adding involving distributing said agent or reagent uniformly throughout the combustible material to provide a combustible mixture, burning said mixture

so as to provide a reduction in NOx from that produced if said combustible material was  
burned by itself.

wherein said NOx reduction agent or reagent consists essentially of the following  
by weight:

<u>a Hydrocarbon wax</u>	<u>0-60%</u>
<u>a Fatty acid</u>	<u>0-10%</u>
<u>Ammonia</u>	<u>0-2%</u>
<u>Urea</u>	<u>10%-60%</u>
<u>Water</u>	<u>30-90%.</u>

29. (Original) A method as in claim 28 wherein said material is coal.
30. (Original) A method as in claim 29 wherein said material is bituminous coal.
31. (Canceled)
32. (Previously presented) A method as in claim 28 wherein said NOx reduction reagent consists essentially of the following by weight:
- |                   |      |
|-------------------|------|
| a Hydrocarbon wax | 11%  |
| a Fatty acid      | 3.5% |
| Ammonia           | 5%.  |
| an Amide          | 20%  |
| Water             | 65%  |
33. (Previously presented) A method as in claim 32 wherein said amide is urea.

34. (Original) A method as in claim 32 wherein said fatty acid is stearic acid.
35. (Previously presented) A method as in claim 32 wherein said reagent further comprises Titanium Dioxide.
36. (Original) A method as in claim 28 wherein said mixing step includes grinding said material to dust as the reagent is added thereto.
37. (Original) A method as in claim 36 wherein said material is coal.
38. (Previously presented) A method as in claim 28 further comprising the step of adding a wetting agent to said material prior to addition of said agent or reagent.
39. (Previously presented) A method as in claim 28 wherein said reagent consists essentially of the following by weight:

Ammonia	0-2%
A Wetting agent	0-5%
Water	30-95%
Ammonia like compounds selected from the group consisting of Amides, Amines, Amino acid and other chemical compounds which contain at least one NH, NH <sub>2</sub> , or NH <sub>3</sub> functional group	0-60%
Titanium Dioxide	0-10%

40. (Previously presented) A method as in claim 39 wherein the reagent comprises 1 to 20 parts and 1-6 parts of the following by weight:

a Hydrocarbon wax	0-60%
a Fatty acid	0-10%
Ammonia	0-2%
Water	30-90%

41. (Previously presented) A synfuel meeting the requirements of Section 29 of the Internal Revenue Code definition of a "synfuel", said synfuel consisting essentially of coal which has been treated with and which has chemically reacted with a chemical change agent composition consisting essentially of the following by weight:

a Slack wax	11%
a Fatty Acid	3.5%
an Amide	20%
Ammonia	.5%
Water	65%.

42. (Original) A synfuel as in claim 41 wherein said Fatty Acid is stearic acid.

43. (Original) A synfuel as in claim 41 wherein said Amide is urea.

44. (Original) A synfuel as in claim 41 wherein said composition also includes a NOx reducing agent for aiding in reducing NOx emissions when said coal is burned.

45. (Previously presented) A synfuel as in claim 44 wherein said NOx reducing agent is selected from the group consisting of:

Aluminum Silicate

Vanadium Oxide

Tungsten Oxide  
Titanium Dioxide  
Iron Oxide as well as other Iron containing material or compounds that form Iron Oxide in a combustion zone,  
and combinations of the foregoing.

46. (Previously presented) A chemical change agent or reagent composition for use as a coal treatment to enhance complete combustion and to reduce NOx in combustion gases, said composition consisting essentially of the following by weight:

A hydrocarbon wax	0-60%
A fatty acid	0-10%
Ammonia	0-2%
Water	30-90%,

wherein the chemical change agent or reagent composition further comprises Titanium Dioxide.

47. (Previously presented) A reagent as in claim 7 further comprising Titanium Dioxide.

48. (Previously presented) A reagent as in claim 10 further comprising Titanium Dioxide.

49. (New) A method as in claim 28 wherein said NOx reduction agent or reagent further comprises an agent selected from the group consisting of:

Aluminum Silicate  
Vanadium Oxide  
Tungsten Oxide

Titanium Dioxide

Iron Oxide as well as other iron containing compounds,  
and combinations of the foregoing.

50. (New) A method as in claim 28 wherein said NOx reduction agent or reagent further comprises Titanium Dioxide.

51. (New) A method of reducing NOx emissions in the burning of coal, said method comprising

providing an NOx reducing chemical change agent;

adding catalytic compounds to said NOx reducing chemical change agent or to the coal directly before or during combustion, said catalysts being of small particle size;

adding said NOx reducing chemical change agent to said coal prior to or during burning, and

adding a wetting agent to said coal and agent mixture.

52. (New) A method of reducing NOx emissions in the burning of coal, said method comprising

providing an NOx reducing chemical change agent;

adding catalytic compounds to said NOx reducing chemical change agent or to the coal directly before or during combustion, said catalysts being of small particle size;

adding said NOx reducing chemical change agent to said coal prior to or during burning,

wherein said NOx chemical change agent is selected from the group consisting of Aluminum Silicate, Vanadium Oxide, Tungsten Oxide, Titanium Dioxide, Iron Oxide, other Iron Compounds and a combination of the foregoing.

53. (New) A method of reducing NOx in combustible emissions, said method comprising:

providing a source of combustible material,

adding a NOx reduction agent or reagent to said material prior to burning, said adding involving distributing said agent or reagent uniformly throughout the combustible material to provide a combustible mixture,

burning said mixture so as to provide a reduction in NOx from that produced if said combustible material was burned by itself, and

adding a wetting agent to said material prior to addition of said agent or reagent.

54. (New) A method of reducing NOx in combustible emissions, said method comprising:

providing a source of combustible material,

adding a NOx reduction agent or reagent to said material prior to burning, said adding involving distributing said agent or reagent uniformly throughout the combustible material to provide a combustible mixture,

burning said mixture so as to provide a reduction in NOx from that produced if said combustible material was burned by itself,

wherein said agent or reagent consists essentially of the following by weight:

Ammonia	0-2%
A Wetting agent	0-5%
Water	30-95%
Ammonia like compounds selected from the group consisting of Amides, Amines, Amino acid and other chemical compounds which contain at least one NH, NH <sub>2</sub> , or NH <sub>3</sub> functional group	0-60%
Titanium Dioxide	0-10%.

55. (New) A method as in claim 53 wherein said NOx reduction agent or reagent further comprises a catalytic compound selected from the group consisting of:

Aluminum Silicate  
 Vanadium Oxide  
 Tungsten Oxide  
 Titanium Dioxide  
 Iron Oxide as well as other iron containing compounds, and combinations of the foregoing.

56. (New) A method as in claim 54 wherein said NOx reduction agent or reagent further comprises a catalytic compound selected from the group consisting of:

Aluminum Silicate  
 Vanadium Oxide  
 Tungsten Oxide  
 Titanium Dioxide  
 Iron Oxide as well as other iron containing compounds, and combinations of the foregoing.